

**General Requirements**

**PLEASE NOTE:** The following items are brief summaries of the appropriate Building Code language. This is a partial list of common code items.

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**GENERAL:**

- Provide premises identification by using approved 4" high numbers or addresses in such a position as to be plainly visible and legible from the street or road fronting the property (Section 502 UBC).
- No building inspections will be made without the approved plans on the job site (Section 106.2 UBC).
- This review does not imply approval of any construction, which does not comply with the Uniform Building Code (Section 406.4.3).
- The inspection record cards, on the back of the building permit, is required to be posted on-site at the time of inspection. (Section 108.2 UBC)

**FOOTINGS AND FOUNDATION:**

- Concrete or masonry foundations require reinforcing steel. 2,500 PSI minimum. (Section 1806.7.1 UBC)
- Footings shall be of masonry, concrete, or approved treated wood, and shall extend below the frost line. (Section 1806.1 UBC)
- Provide 18" by 24" access opening to under-floor crawl space. Provide 22" by 30" readily accessible opening to attic area. (Sections 2306.3 and 1505.1 UBC)
- Foundation ventilation requires 1 square foot of vent per 150 square feet of under-floor area. Openings shall be as close to corners as possible and shall provide cross ventilation. (Section 2306.7 UBC)
- Provide damp proofing of foundation walls enclosing a basement below finish grade by methods and materials approved by the Building Official. (Section 1402.4 UBC)
- Provide ground cover of 6-mil black polyethylene or equivalent in crawl space. (Energy Code and Section 2306.7 UBC)
- Provisions shall be made for the control and drainage of surface water away from building. (Sections 1806.5.5 and 1806.5.5 UBC)

**FLOORS:**

- Mud sills and plates in direct contact with concrete shall be pressures treated, or foundation redwood, all marked or branded by an approved agency. (Section 2306.4 UBC)
- Wood supports in direct contact with earth shall be pressure treated, (Section 2306.6)
- Wood girders in concrete shall have ½ inch air space on top, sides and ends. (Section 2306.6 UBC)
- Minimum of 12 inches of clearance under beams, 18 inches under joists. (Section 2306.3 UBC)
- Floor joists shall have a bearing of not less than 1-1/2 inches on wood or metal and 3 inches on masonry. (Section 2320.8.2 UBC)
- Foundation plates or sills shall be bolted as required by Section 1806.6. Minimum 7 inch embedment in concrete or masonry with ½ inch anchor bolts spaced a maximum of 6'-0" on center, and within 12" of each corner, minimum 2 bolts per piece, with nuts and washers. Plate washers shall be a minimum of 2" by 2" by 3/16 inch thick. (Section 1806.6.1 UBC)
- Floor joists shall have 2-inch thick solid blocking the full depth of joist at each support, except where ends of joists are nailed to a header, band or rim joist. (Section 2320.8.3 UBC)
- Holes bored in joists shall not be within 2 inches of the top or bottom of the joist and the diameter shall not exceed 1/3 the depth of the joist. (Section 2320.8.3 UBC)
- Joists under and parallel to the bearing partitions shall be doubled. Bearing partitions perpendicular to joists shall not be offset from supporting girders, walls or partitions more than the joist depth. (Section 2320.8.5 UBC)

**WALLS:**

- Wood-frame walls subject to water splash shall be protected with waterproof material. (Sections 2306.13 and 1402.1 UBC)
- Exterior walls to have weather resistive barrier. (Sections 1402.1 and 1402.2 UBC)
- Nails used to attach siding shall be corrosion-resistant. (Section 2310.7 UBC)
- Maximum diameter for holes bored in bearing wall studs is 40 percent (60 percent in non-bearing wall studs) of stud thickness. Maximum notching in bearing wall studs is 25 percent of stud thickness (40 percent in non-bearing partitions). (Section 23.20.11.7 UBC)

**ROOF/CEILING:**

- Roofs shall be designed to sustain dead loads plus live loads in accordance with Section 1607.4 UBC. 25 pounds per square foot is the minimum live load for Clark County.
- Roof vertical flashing of 26-gauge and valley flashing of 28-gauge, corrosion-resistant metal over underlayment of not less than Type 15 felt is required for wood shingle or shake roofs. (Sections 1508 and 1509 UBC)
- Provide attic ventilation. The free ventilation area must be 1/150th of the attic area (1/300th of attic area if 50 percent of the required vents are 3 feet above the 50 percent as eave or cornice vents). (Section 1505.3 UBC)
- Water exposure of wood shingles or shakes shall comply with Table 15-B-2, UBC.
- Roofing applications shall be per Tables 15-B-1, 15-B-2, 15-C, 15-D-2, 15-E, 15-F, and 15-G UBC.
- Wood shakes shall be certified Number 1 grade. (UBC standard 32-8 or 32-11)

- Ridge board thickness shall not be less than 1-inch nominal and not less in depth than the cut end of rafters required. (Section 2320.12.3 UBC)
- Rafters shall be nailed to adjacent ceiling joists to form a continuous tie. When not parallel, rafters shall be tied to 1-inch by 4-inch minimum crossties. Rafter ties shall be spaced not more than 4-feet on center. (Section 2320.12.6 UBC)
- Rafters, ceiling joists and trusses shall be supported laterally to prevent rotation with full-depth blocking. (Section 2306.7 UBC)
- Plywood roof sheeting shall be bonded with exterior glue where underside is exposed. (Section 2306.7 UBC)
- Plans and specifications for manufactured trusses shall be prepared by an architect or engineer and submitted to Clark County prior to fabrication. Such trusses shall not be altered or modified without approval of the design architect or engineer. Truss identification required on each truss. (Section 106.3.2 UBC)
- Lateral force bracing to be per Section 2320.11.3 and Table 23-IV-C-1, with a 4-foot panel at each corner and every 25 foot interval on all exterior walls and main cross partitions. Provide engineering for omission of required bracing, or see alternate brace wall panels, (Section 2320.11.4 UBC) and Clark County approved alternate details.

**INTERIOR:**

- Provide natural light and ventilation by means of windows and or skylights equal to 1/10th of habitable room areas, ½ of which shall be openable. (Sections 1203.2 and 1203.3 UBC)
- Provide either an emergency escape and rescue window with minimum net clear opening of 5.7 square feet and a minimum height of 24 inches and a minimum width of 20 inches and with sill not more than 44 inches above the floor, or an exterior door for emergency exit from sleeping room or basements. (Section 310.4 UBC)
- Security protection on emergency escape or rescue windows shall be equipped with approved release mechanisms openable from the inside without the use of a key or special knowledge and the building is equipped with smoke detectors as in Section 310.9 UBC.
- Provide mechanical ventilation in bathroom, kitchen, and laundry rooms. See UBC Sections 1203.2 and 1203.3 and the Washington State Indoor Air Quality Code.
- Separate toilet room from kitchen by tight-fitting door. (Section 302.6 UBC)
- Dwellings are required to have smoke detectors in each bedroom, in the area leading to bedrooms, and on each building level. Detectors to be powered by house current with battery backup. Detectors to be placed in ceiling near stairway. Place detector in high area of ceilings when it is 24-inches or more above bedroom hallway. (Section 310.9 UBC)
- Openings from a private garage into a sleeping room are prohibited. (Section 312.4 UBC)
- Every dwelling unit shall be provided with heating facilities capable of maintaining a temperature of 70 degrees F. in all habitable rooms at a point 3 feet above the floor. (Section 310.11 UBC)
- Provide a 1-3/8 inch minimum self-closing solid-core door or labeled 20-minute door between garage and living unit. (Section 302.4 UBC, exception (3) UBC)
- Ducts piercing garage separation wall shall be 26-gauge galvanized steel. (Section 302.4 UBC)
- Water closets shall have a minimum of 30 inches of net clearance, side wall to side wall, and at least 24-inches of clearance in front. (Section 2903.2 WAC Amendments)
- Shower areas shall have a hard, non-absorbent surface wall to a height of not less than 70 inches. (Section 807.1.3 UBC)

- Shower doors and bathtub doors shall have tempered laminated safety glass or approved plastic glazing. (Section 807.1.3 UBC)
- All glass must be safety glass within 18 inches of the floor, and within 24 inches of a door, and in a door, and must conform with Section 2406.1 UBC.
- Private stairways serving an occupant load of less than 10 may be constructed with 8-inch maximum rise and 9 inch maximum run per Section 1003.3.3 (Exception 1). Handrails required not less than 34 inches nor more than 38 inches above nosing of stair tread per Section 1003.3.3.6 UBC. Minimum stair width 36 inches per Section 1006.2 UBC, headroom minimum of 6 foot, 8 inches per Section 1006.15 UBC. Hallway minimum width 36 inches per Section 1004.3.3.2 UBC.
- Guardrails shall be 36 inches in height for dwelling. Open stairs and guardrails shall have intermediate rails or an ornamental pattern such that a 4-inch diameter sphere cannot pass through. (Section 509.3 UBC)
- Usable space under stairs shall be one-hour fire construction on the enclosed side. (Section 1003.3.3.9 UBC)

**INSULATION:**

- Exposed wall and ceiling insulation and vapor barrier shall have F.S.25 rating when installed in concealed spaces and not in direct contact with finish surface material. (Sections 707.2 and 707.3 UBC and Washington State Energy Code)
- Foamed plastic insulation shall be protected on its interior exposed surface by a thermal barrier having an index of 15 or more (¼ inch gypsum wallboard, plywood or hardboard, or 1-1/2 inch thick mineral fiber insulation complies). (Section 2602.4 UBC)
- All wall batts shall be face-stapled to studs. (Washington State Energy Code)

**MISCELLANEOUS:**

- In garages, in elevate any appliance, which generates a glow spark, or flame 18-inches above the floor. (1997 Uniform Mechanical Code)
- In garages, all appliances shall be protected from auto damage per 1997 UMC.
- Separate permit is required for all wood stoves.
- Fireplace reinforcement is required. (Section 3102.4.3 UBC)
- Install positive ties at beam-to-column intersections and footing-to-column intersections per Section 2314 UBC
- Skylights shall be laminated glass, wire glass or plastic, annealed, heat strengthened or tempered glass per Sections 2409 or 2603 UBC.
- Wood stoves and fireplaces must have tightly-fitted flue dampers operated with a readily accessible manual control and a direct connection to outside combustion air. Tight-fitting doors are required on all fireplace openings.
- Dryer vents to be minimum 4-inches in diameter with a maximum total length of 14 feet, with a maximum of two 90-degree elbows. (Section 504.3, 504.3.1, and 504.3.2 UMC)